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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte EUGENIO MANNELLA*

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Appeal 2009-013505  
Application 10/797,884  
Technology Center 3600

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Before WILLIAM F. PATE, III, MICHAEL W. O'NEILL, and  
KEN B. BARRETT, *Administrative Patent Judges*.

O'NEILL, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown in the PTOL-90A cover letter attached to this decision.

#### STATEMENT OF THE CASE

Eugenio Mannella (Appellant) appeals under 35 U.S.C. § 134 from the Examiner's decision finally rejecting claims 1-24. We have jurisdiction under 35 U.S.C. § 6(b).

#### *The Invention*

The claims on appeal relate to a lock assembly.

Claims 1, 11, and 17, reproduced below, are representative of the subject matter on appeal.

1. A lock core assembly comprising:  
a barrel which defines an axis; and  
a plug mountable for rotation within said barrel for  
rotation around said axis relative said barrel, said plug  
comprising [a] rear segment which defines a first plane  
parallel to a second plane, said first plane and said second  
plane transverse and offset along said axis, a first  
engagement member at least partially within said first  
plane and a second engagement member at least partially  
within said second plane, said first engagement member  
perpendicular to said second engagement member.
  
11. A lock assembly comprising:  
a lock housing;  
a barrel which defines an axis, said barrel mountable  
within said housing;  
a plug mountable for rotation within said barrel for  
rotation around said axis relative said barrel, said plug  
comprising a male rear segment;  
a torque blade comprising a female end engageable  
with said male end; and  
a retainer axially retaining said female end over said  
male end.

17. A lock assembly comprising:
  - a lock housing;
  - a barrel which defines an axis, said barrel mountable within said housing;
  - a plug mountable for rotation within said barrel for rotation around said axis relative said barrel, said plug comprising a male rear segment; and
  - a spindle comprising a female end with opposed cams engageable with said male rear segment.

*The Rejections*

The following Examiner's rejections are before us for review:

Claims 1, 4, 5-7, 9-13, 15-19, and 21-23 are rejected under 35 U.S.C. § 102(b) as anticipated by Neary (U.S. Patent No. 4,068,510, issued Jan. 17, 1978). Ans. 3.

Claims 1-3, 5-7, 9, 11-14, 16-20, 22, and 23 are rejected under 35 U.S.C. § 102(b) as anticipated by Deckert (U.S. Patent No. 4,444,033, issued Apr. 24, 1984). Ans. 4.

Claims 8 and 24 are rejected under 35 U.S.C. § 103(a) as unpatentable over either Neary or Deckert in view of Jacobi (U.S. Patent No. 2,348,135, issued May 2, 1944). Ans. 4.

**SUMMARY OF DECISION**

We AFFIRM-IN-PART.

## DISCUSSION

### *Issues*

The determinative issues in this appeal are:

(1) Did the Examiner err in finding that the end of the key 68 as shown in Figure 8 of Neary constitutes a rear segment or a male rear segment of the plug 59?

(2) Did the Examiner err in failing to make findings with respect to whether the rear segment of the plug 136 of Deckert defines a first plane parallel to a second plane with the first and second planes being transverse and offset along the axis of the barrel as required by claim 1?

(3) Did the Examiner err in failing to make findings with respect to whether Deckert discloses a torque blade having a female end capable of engaging with a male rear segment of a plug 136 as required by claim 11?

(4) Did the Examiner err in finding that Deckert discloses a first engagement member (external threads 139) which is part of its plug (plug 136) as required by claim 17?

(5) Did the Examiner err in concluding with respect to claim 24 that it would have been obvious to one of ordinary skill in the art to modify the retainer (collar 140) of Deckert to be frustum-conically shaped by the teachings of Jacobi for the reason that it would have been an obvious matter of design choice to prevent tampering by providing an anti-drill sloped surface?

### *Analysis*

#### *Issue I*

Appellant contends that the Examiner has improperly interpreted the end of the key 68 of Neary as a part of the plug 59. App. Br. 6. The

Appellant also contends that “[t]he plug 59 of *Neary* does not include a first engagement member and a second engagement member, or a male segment that is engageable with a female end of a torque blade or spindle as in Appellant’s claims.” *Id.* Appellant also contends that the Examiner’s argument (i.e., “it would have been obvious to one of ordinary skill in the lock art to consider the fully inserted and assembled key of *Neary* as part of the plug such that the rear end of the key is considered the rear segment of the plug” (Ans. 5)) “is not a consideration in an anticipation rejection” because “[a]nticipation requires that each and every element recited in the claim is disclosed in the cited reference, which it is not in this rejection.”

Reply Br. 1.

The Examiner’s position is that *Neary* discloses each and every feature of the claimed lock assembly including a barrel and plug 59. Ans. 3. More particularly, the Examiner posits that the plug 59 has a rear segment (claims 1-10) or male rear segment (claims 11-24) in the form of the end of the key 68 as shown in Figure 8 of *Neary*. Ans. 3-4. The Examiner also posits that the first and second engagement members are “formed by the perpendicular ends of the key 68 as shown in Fig. 8.” Ans. 4. The Examiner argues that:

With respect to Appellant’s arguments on page 5-6 of the brief regarding the rejection over *Neary*, it is maintained that *Neary* teaches a key which has a rear male segment defining first and second perpendicular portions, with portions lying in two parallel planes as shown in Figure 8 of *Neary*, and wherein the key is integral with the plug when fully inserted into the keyway and rotates therewith as a fixed plug element. While Appellant argues that the key is a separate element

and that it is improper for the Examiner to consider the key part of the claimed plug, the Examiner disagrees. It is well known in the lock art to provide a lock plug and key with the feature of locking the key into a plug, as evidenced by the patents in class 70, subclass 389 (key removal preventing), thereby providing a fixed, integral plug device. Therefore, it would have been obvious to one of ordinary skill in the lock art to consider the fully inserted and assembled key of Neary as part of the plug such that the rear end of the key is considered the rear segment of the plug.

Ans. 5.

Neary discloses a double cylinder safety lock having a pin tumbler cylinder mechanism which includes a cylinder housing or body 21 in which the cylinder plug 22 is rotatable about an axis 17. Title and col. 2, ll. 42-46. A collar 29 has internal threads for threaded engagement with a threaded end of the plug 22 and is in abutment with the body 21. Col. 3, ll. 12-14.

We agree with Appellant that the end of the key 68 of Neary cannot be considered to be part of the plug. We also agree with Appellant that the Examiner's obviousness statement in the Response to Arguments section of the Examiner's Answer is not a consideration with respect to an anticipation rejection (i.e., the Examiner did not set forth a 35 U.S.C. § 102(b) or in the alternative 35 U.S.C. § 103(a) rejection). Thus, it does not appear that the Examiner's rejection discloses each and every element of the claims, because the Examiner has not made any findings with respect to proper features of Neary's plug 59 which constitute perpendicular first and second engagement members and a rear segment or male rear segment.

In view of the foregoing, we do not sustain the Examiner's rejection of claims 1, 4-7, 9-13, 15-19, and 21-23 under 35 U.S.C. § 102(b) as anticipated by Neary.

*Issue 2*

Appellant contends that "claim 1 recites that the rear segment 'defines a first plane parallel to a second plane' and that the first plane and the second plane are 'transverse and offset along said axis.'" Reply Br. 2. Appellant also contends that "[t]he rejection does not even mention the claimed planes." *Id.*

The Examiner's position is that Deckert discloses the invention substantially as claimed in claims 1-3, 5-7, and 9. Ans. 4. More particularly, the Examiner posits that:

Deckert teaches a lock and spindle assembly housing comprising a barrel and plug 136 having a rear male segment (at 139,156,158 in Figure 18) with first engagement member (at 139) and second perpendicular engagement member 156 and a spindle rod 142 having a female end 144,146,152 (female end is hole in 152 which receives male pin member 156) which is engaged with a portion of the plug end male rear segment and having cam segments 144,146 to engage the male member and further comprising a cylindrical retainer 140 which engages the grooves (threads) in the plug rear segment.

*Id.*

We agree with Appellant that the Examiner has failed to make any findings with respect to whether or not the rear segment of Deckert's plug defines first and second parallel planes which are transverse and offset along the axis of the barrel. Thus, the Examiner has failed to establish that

Deckert discloses each and every feature of claims 1-3, 5-7, and 9 in order to anticipate the claims 1-3, 5-7, and 9.

In view of the foregoing, we do not sustain the Examiner's rejection of claims 1-3, 5-7, and 9 under 35 U.S.C. § 102(b) as anticipated by Deckert.

*Issue 3*

Appellant contends that "claim 11 recites 'a torque blade comprising a female end.'" and that "[t]he rejection does not even mention a torque blade." Reply Br. 2.

The Examiner's position is as discussed *supra* with respect to *Issue 2*.

We agree with Appellant that the Examiner has failed to make any finding with respect to whether or not Deckert discloses a torque blade as is recited in claim 11. Thus, the Examiner has failed to establish that Deckert discloses each and every claim feature in order to anticipate claims 11-14 and 16.

In view of the foregoing, we do not sustain the Examiner's rejection of claims 11-14 and 16 under 35 U.S.C. § 102(b) as anticipated by Deckert.

*Issue 4*

Appellant has not made any specific contentions with respect to claim 17, but generally contends that the Examiner's interpretation of the plug as being comprised of elements 139 (threads), 156 (pin), and 158 (bore) of Deckert is improper because "element 139 is an end of the body 130 (see col. 6, lines 21-24), and is not part of the plug 136." Reply Br. 1.

The Examiner's position is that:

Deckert teaches a lock and spindle assembly housing comprising a barrel and plug 136 having a rear male segment (at 139,156,158 in Figure 18) with first engagement member (at 139) and second

perpendicular engagement member 156 and a spindle rod 142 having a female end 144,146,152 (female end is hole in 152 which receives male pin member 156) which is engaged with a portion of the plug end male rear segment and having cam segments 144,146 to engage the male member and further comprising a cylindrical retainer 140 which engages the grooves (threads) in the plug rear segment.

Ans. 4.

Deckert discloses a cylinder assembly 129 having an exterior body 130 with a lower cylindrical portion 132 and a top portion 134. Col. 6, ll. 15-20. A plug 136 is mounted for rotation within the lower cylindrical portion 132. Col. 6, ll. 20-21. The plug 136 includes a fixed annular collar 138 at one end and threads 139 at an opposite end. Col. 6, ll. 21-30. At the threaded end of the plug is an opening leading to a bore 158 along the outer periphery of the plug 136 in its longitudinal direction. Col. 6, ll. 44-52. The bore 159 houses a spring and pin 156. Col. 6, ll. 52-54. The pin engages an opening 160 in a washer 150 having its opening 150 around a tail cam 142 near one end of the tail cam 142. Col. 6, ll. 44-52. At the very end of the tail cam 142 is base 144 having shoulder stops 146, 148 thereon. *Id.* Also around the tail cam is a collar 140 having internal threads for mating with the external threads 139 on the end of the plug 136. Col. 6, ll. 24-28.

We cannot agree with Appellant that the Examiner's interpretation of elements 139, 156, and 158 as being a part of plug 136 is improper. At column 6, lines 24-27, Deckert clearly states that "[t]he second end portion of plug 136 projects a small distance out beyond the second end of the exterior body 130 and is provided with external threads 139 that mate with the internal threads (not shown) of collar 140." It is clear from this quoted

passage of Deckert that the external threads 139 are considered to be part of the plug 136. In addition, the bore 158 in the body of the plug 136 is necessarily a part of the plug 136. Finally, we do not find that it was unreasonable for the Examiner to find that the pin 156 housed in the bore within the body of the plug 136 constitutes a part of the plug 136.

In view of the foregoing, we sustain the Examiner's rejection of claims 17-20, 22, and 23 under 35 U.S.C. § 102(b) as anticipated by Deckert.

*Issue 5*

Appellant contends that the Examiner's motivation for combining Jacobi with either Neary or Deckert (i.e., "to prevent tampering by providing an anti-drill sloped surface") is improper because "the rejection does not establish how one of ordinary skill would expect a sloped surface on a retainer arranged deep inside the lock to provide a security enhancement." Reply Br. 2. Appellant further contends that "the Examiner seems to be relying on personal knowledge or pure speculation that a retainer having a sloped surface would somehow be drill-proof and provide a security improvement." *Id.*

The Examiner's position is that "Jacobi teaches a frustum-conical shaped retainer (at 32 in Figure 1)" and "[i]t would have been obvious to modify the retainer of either Neary or Deckert to have a frustum-conical shaped retainer as taught by Jacobi as an obvious matter of design choice to prevent tampering by providing an anti-drill sloped surface." Ans. 4-5.

Neary and Deckert have been discussed *supra*.

Jacobi discloses an automobile door lock known as a pillar lock.

P. 1, ll. 1-5. The lock has a casing or housing 5 having a bore 6 which receives a rotatable cylinder 7. P. 2, ll. 19-24. The casing or housing 5 and the cylinder 7 are provided with pin tumblers 8 by which the cylinder 7 is secured against rotation in a neutral position at which a key may be inserted and withdrawn. P. 2, ll. 24-28. The cylinder 7 ends at least on one side with a beveled flange 32. Figs. 7 and 8 and p. 2, ll. 107-109.

We agree with Appellant that the Examiner's reasoning is speculative, particularly since Jacobi does not say anything about its sloped surface being for prevention of tampering. In addition, we agree with Appellant that making the retainer of either of Neary or Deckert to have a sloped surface would not provide a security enhancement because the retainers are located deep within the lock.

In view of the foregoing, we do not sustain the Examiner's rejection of claims 8 and 24 under 35 U.S.C. § 103(a) as unpatentable over either Neary or Deckert in view of Jacobi.

#### CONCLUSIONS

The Examiner erred in finding that the end of the key 68 as shown in Figure 8 of Neary constitutes a rear segment or a male rear segment of the plug 59.

The Examiner erred in failing to make findings with respect to whether the rear segment or male rear segment of the plug 136 of Deckert defines a first plane parallel to a second plane with the first and second planes being transverse and offset along the axis of the barrel as required by claim 1.

The Examiner erred in failing to make findings with respect to whether Deckert discloses a torque blade having a female end capable of engaging with a male rear segment of a plug 136 as required by claim 11.

The Examiner did not err in finding that Deckert discloses a first engagement member (external threads 139) which is part of its plug (plug 136) as required by claim 17.

The Examiner erred in concluding that it would have been obvious to one of ordinary skill in the art to modify the retainer of either Neary or Deckert to be frustum-conically shaped by the teachings of Jacobi for the reason that it would have been an obvious matter of design choice to prevent tampering by providing an anti-drill sloped surface.

#### DECISION

We reverse the Examiner's 35 U.S.C. § 102(b) rejections of claims 1, 4, 5-7, 9-13, 15-19, and 21-23 as anticipated by Neary and claims 1-3, 5-7, 9, 11-14, and 16 as anticipated by Deckert and the Examiner's 35 U.S.C. § 103(a) rejection of claims 8 and 24 as unpatentable over either Neary or Deckert in view of Jacobi.

We affirm the Examiner's 35 U.S.C. § 102(b) rejection of claims 17-20, 22, and 23 as anticipated by Deckert.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

**AFFIRMED-IN-PART**

Appeal 2009-013505  
Application 10/797,884

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